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Docket No.: KCC-15,481

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants: Daniel J. SORENSEN, et al.

Serial No.: 09/849,594

Group No.: 1771

Filing Date: 04 May 2001

Examiner: E. Cole

Title: LEAK-PROOF INTERMITTENT  
ULTRASONIC BONDS

Confirmation No. 8899

Customer No. 35844

**APPELLANTS' SUPPLEMENTAL REPLY BRIEF UNDER 37 CFR 41.41**

Mail Stop Appeal Brief - Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Appellants herewith file their Supplemental Reply Brief in the above-identified case, in response to the Supplemental Examiner's Answer mailed 20 June 2005. Appellants respectfully maintain that the Examiner's assertions are incorrect as a matter of law and fact. Thus, for the reasons previously set forth, and for the reasons set forth below, Appellants respectfully request that this Board reverse the rejection of Claims 1, 3-10, 12-16, 18-29, and 31-32 under 35 U.S.C. §103(a).

I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Appeal Brief - Patents, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on

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### APPELLANTS' RESPONSE

In response to the Supplemental Examiner's Answer, Appellants maintain that *Bridges* fails to disclose or suggest a bond or seal that is leak-proof, as recited in Appellants' claimed invention. Instead, and in contrast, the invention in *Bridges* is directed to a tear line, which is a line of weakness along which a garment may be torn for ease of removal. When a seam is torn apart, the seam is destroyed and is not capable of preventing leaks.

Although Appellants' invention and *Bridges*' invention both use ultrasonic bond points, the bond points in these two inventions are applied to different types of materials in different regions of a garment and with opposing intentions. Because the intended use of the ultrasonic bond points is completely opposite in these inventions, i.e., a leak-proof seal versus a weakened tear line, there is no suggestion or motivation to modify the size, shape, and/or spacing of bond points in *Bridges* to provide the leak-proof seal of Appellants' claimed invention.

For example, adding more bond points to the outer rows in *Bridges*, as would be required to achieve Appellants' claimed invention, would likely render the tear line unsatisfactory for its intended purpose, since the resulting tear line would likely be too strong to permit tearing.

Furthermore, *Bridges* teaches away from locating the tear line along an edge, as recited in Appellants' independent Claims 1 and 27. More particularly, *Bridges* suggests that the side seams may be constructed with maximum strength if the tear line is located *other* than at the side seams (Col. 3, lines 61-63). Thus, *Bridges* discloses point-bonded tear lines positioned away from the edges of the inner and outer layers, which is contrary to the limitations in Appellants' independent Claims 1 and 27.

*EP '284* does not remedy the deficiencies of *Bridges*. The bond pattern in Fig. 4 of *EP '284*, although it is illustrated as having at least three parallel rows of thermal bond points, is described as an example of *minimized use* of thermal bonds in the containment flap (Col. 10, lines 1-3). With spacing that is far enough apart to allow an elastic member to pass between the bond points, the bond pattern in *EP '284* would certainly not result in a leak-proof seal.

Both *Bridges* and *EP '284* fail to disclose or suggest a plurality of ultrasonic bond points joining a containment flap to a garment and forming a leak-proof

seal between the containment flap and the garment, as recited in Appellants' independent Claim 14. Instead, the tear lines in *Bridges* are located on a front portion of the garment extending from the waist opening to the leg openings, thereby enabling a caretaker to tear the lines apart in order to remove the garment from the wearer. *EP '284* discloses bond patterns for securing an elastic member within a containment flap. Since the bond points in *EP '284* are used to secure an elastic member *within* the confines of a containment flap, and not for securing one element to a separate element, there is no motivation to space the bond points close enough to render the seam "leak-proof."

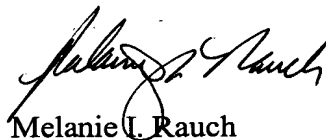
Because of the different locations and the different qualities of the bond patterns in *Bridges* and *EP '284*, there is no suggestion or motivation for combining the teachings of *Bridges* with the teachings of *EP '284*. Furthermore, these references teach away from the proposed combination thereof.

Thus, *Bridges* in view of *EP '284* fails to disclose or suggest Appellants' claimed invention.

### CONCLUSION

For the reasons presented above, Appellants respectfully submit that the Supplemental Examiner's Answer does not overcome Appellants' Appeal Brief. Therefore, Appellants respectfully request that the Board reverse the rejections proposed by the Patent Office.

Respectfully submitted,



Melanie I. Rauch  
Registration No. 40,924

Pauley Petersen & Erickson  
2800 West Higgins Road  
Suite 365  
Hoffman Estates, Illinois 60195  
(847) 490-1400  
FAX (847) 490-1403